SODIUM CHLORATE

PRODUCT IDENTIFICATION

CAS NO. 7775-09-9
EINECS NO. 231-887-4
FORMULA NaCIO3
MOL WT. 106.44
H.S. CODE 2829.11

Na⁺ I

TOXICITY Oral rat LD50: 1200 mg/kg

SYNONYMS Soda Chlorate; Chloric acid, sodium salt;

chlorax; Chlorsaure (German); Natrium Chloraat (Dutch); Natrium Chlorat (German); Sodio (Clorato

Di) (Italian); Sodium (Chlorate De) (French); Chlorate of Soda;

DERIVATION chlorine on hot concentrated sodium hydroxide

CLASSIFICATION DISINFECTANTS /

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE white crystalline solid, saline taste

MELTING POINT 248 C

BOILING POINT 300 C (Decomposes)

SPECIFIC GRAVITY 2.5

SOLUBILITY IN WATER soluble in water and alcohol

pH 5 - 7 VAPOR DENSITY 3.7

AUTOIGNITION

NFPA RATINGS Health: 1 Flammability: 0 Reactivity: 1 Other: Oxidizer

REFRACTIVE INDEX

FLASH POINT Not combustible

STABILITY Stable under ordinary conditions

APPLICATIONS

Sodium chlorate is a powerful oxidizing agent. It is used to manufacture explosives and matches because of its ability to produce oxygen. Chlorate is a powerful ingredient of bleaching powder used in paper and pulp processing and calico printing. It is used also a weed killer and defoliant.

SAI	F٩	SΡ	FCI	IFI <i>C</i>	TAC	ION
J / \L		JI.	$ \circ$		レノハロ	-

APPEARANCE	white crystalline solid
CONTENT	99.0% min
WATER INSOLUBLES	0.03% max
CHLORIDES	0.3% max
SULFATE SALTS	0.02% max
CHROMATES	0.02% max
Fe	0.03% max
WATER	1.0% max
Fe	0.03% max

TRANSPORTATION

PACKING

HAZARD CLASS 5.1 (Packing Group: II)

UN NO. 1495

OTHER INFORMATION

Hazard Symbols: XN O, Risk Phrases: 22/9, Safety Phrases:13/17/46

Chlorate is the common name for chlorate(V) salt. The related names to the acids are clear when the oxidation number statement is appended; hypochlorite [or chlorate(I)] contains the ion, ClO⁻; chlorite [or chlorate(VI)], ClO₃-; perchlorate [or chlorate(VII)], ClO₄-.